MicroCare[™]



Discover Perfectly Clean

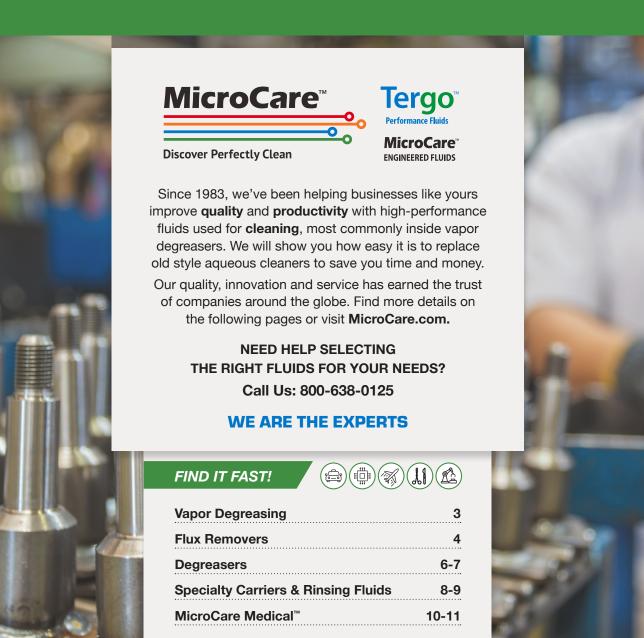
















UNLOCK EXPERT INSIGHTS WITH MICROCARE CRITICAL CLEANING LAB

Our team of chemists and technical experts provide contamination analysis, cleaning trials and help in validating fluids and processes to ensure the best results.



Contact us today to schedule your free consultation. Visit microcare.com/freeconsult to get started!



ON-SITE CLEANING AUDITS



IN-LAB
CLEANING TRIALS



DETAILED CLEANING RECOMMENDATIONS







VAPOR DEGREASING

POWERFUL CLEAN, MINIMAL IMPACT

EFFICIENT, RELIABLE CLEANING

Vapor degreasing is a simple, repeatable process that cleans, rinses and dries parts in one step using low-boiling nonflammable fluids. Ideal for removing oils, fluxes, greases and wax.

MODERN SOLVENT ALTERNATIVES

MicroCare fluids replace legacy solvents with nonflammable options that deliver consistent results while meeting strict air quality regulations.

ENERGY-EFFICIENT

Low-boiling fluids use less energy, helping cut carbon emissions and reduce operating costs.



AUTOMATED VAPOR DEGREASING CLEANING PROCESS

Vapor degreasing uses a closed-loop system with two chambers: a Boil Sump and a Rinse Sump. Parts are cleaned in heated fluid, then moved to the Rinse Sump with fresh fluid. Finally, parts pass through a Vapor Blanket for final rinse and drying. Parts come out clean, dry and spot-free.



1. Clean in the Boil Sump



2. Mechanically Transfer to the Rinse Sump



3. Dry in Vapor Blanket



RECYCLE & REUSE

Sustainable fluids in vapor degreasers are reused hundreds of times, minimizing waste and cutting disposal costs.







FLUX REMOVING FLUIDS

TRUSTED FOR HIGH-RELIABILITY **ELECTRONICS CLEANING**

Powerful, nonflammable cleaners engineered for precision defluxing and degreasing in electronics manufacturing.

Perfect for light to heavy-duty cleaning of printed circuit board assemblies (PCBAs) and components.





KEY FEATURES

- Removes rosin, no-clean and lead-free flux, and solder flux residues
- Penetrates tight spaces on dense and complex PCBAs
- Dissolves ionic contamination, greases and oils
- Suitable for removing both organic and inorganic soils
- Nonflammable, fast-drying, thermally and hydrolytically stable
- Excellent material compatibility on delicate components
- ► Replaces CFCs, HCFCs, HFCs, nPB and chlorinated solvents



FLUX REMOVER	BENEFITS	PART NUMBER	BP (°C)	KB VALUE	LIQUID DENSITY (g/mL)	GWP ¹	FLUORINATED FAMILY	PFAS? (OECD) ²
Tergo [™] GCF Removes organic and inorganic soils	Cleans cutting oils, drawing oils, rosin and no-clean flux residues Ideal replacement for: 3M™ Novec™ 71DA Engineered Fluid	MCC-TGCF	42	38	1.35	274	HFE	YES
Tergo™ SFR Removes ionic residues and tenacious, high-temperature fluxes in lead-free and no-clean solder pastes	Cleans difficult to remove soils Ideal replacement for: 3M™ Novec™ 71DA & 72DA Engineered Fluids	MCC-TSFR	47	128	1.23	32	HCFO / HFE	YES
MicroCare [™] 71DA Engineered Fluid Degreasing & defluxing	Removes solder fluxes, greases, oils and waxes Ideal replacement for: 3M™ Novec™ 71DA Engineered Fluid	MCC-71DAEF	40	33	1.33	170	HFE	YES
MicroCare [™] 72DA Engineered Fluid Medium to heavy-duty degreasing & defluxing	 Removes rosin, solder flux residues, greases, oils and waxes Ideal replacement for: 3M™ Novec™ 72DA Engineered Fluid 	MCC-72DAEF	44	58	1.27	43	HFE	YES

¹ Global Warming Potential, calculated by 100-year time horizon, IPCC AR6.

² Organisation for Economic Co-operation and Development (OECD) PFAS definition, Jul. 2021.





TESTED. TRUSTED. TERGO™.

Fully compliant - today & tomorrow.

Powerful Cleaning. Total Compliance.

High-performance cleaning that meets today's strictest safety and environmental standards.

APPLICATIONS

- Precision cleaning of tight-tolerance, high-value components
- Medical, aerospace, electronics and optical assembly cleaning

BENEFITS

- Safely and efficiently remove tough residues from complex, sensitive parts
- Safe on metals, alloys and delicate materials
- Proven, consistent performance
- Full regulatory compliance



MicroCare[™] ENGINEERED FLUIDS

Replacements for 3M™ Novec™ Engineered Fluids

Rapid & Reliable Cleaning for Everyday Needs

Consistent, high-performance cleaning for general purpose vapor degreasing in industrial settings.

APPLICATIONS

- General vapor degreasing
- Industrial parts cleaning
- Effective on metal and plastic parts
- Remove greases, oils, waxes and silicones

BENEFITS

- Effective cleaning power with low surface tension
- Safe on most metals and plastics
- Replaces nPB, TCE, HCFCs and 3M[™] Novec[™] Fluids





High-Purity Carrier Fluid

Pure. Precise. Proven.

Engineered for applications where cleanliness, material compatibility and fast evaporation are essential. The ideal solution for high reliability industries seeking a sustainable, high performance alternative to legacy solvents.

APPLICATIONS

- Depositing precision coatings and lubricants; rinsing away oils and greases
- Removing lubricants, particulates and moisture from sensitive substrates

BENEFITS

- Filtered and packaged to meet the high purity standards required by the aerospace, medical and electronics industries
- Evaporates quickly, leaving no residue and improving process efficiency
- Higher polarity helps neutralize static charges and release particles from surfaces





Opteon[™] & Vertrel[™] Specialty Fluids

Cleaning & Carrier Fluid Solutions for Critical Applications

Engineered for high-performance cleaning and coating, these fluids deliver reliable results across a range of demanding applications.

APPLICATIONS

- Precision cleaning of electronics, aerospace and medical devices
- Carrier fluids for coatings, lubricants and deposition processes
- Drying and rinsing of moisture-sensitive components

BENEFITS

- Excellent solvency for oils, greases and fluorinated lubricants
- Fast-drying and residue-free for efficient processing
- Compatible with a wide range of metals, plastics and elastomers

DEGREASING FLUIDS

RELIABLE SOLUTIONS FOR VAPOR DEGREASER CLEANING

MicroCare[™] degreasing fluids manage every parts cleaning challenge — from light soils to the heaviest contaminants.

Perfected for vapor degreasing, these fluids deliver consistent, reliable performance on a wide range of machined components.

KEY FEATURES

Tergo HDF

- Broad selection for light, medium and heavy-duty degreasing
- Ideal for use on precision machined metal and plastic parts
- Removes oils, greases, waxes, silicone fluids and particulates
- High solvency and low surface tension
- Fast-drying, nonflammable, non-corrosive and low odor
- Replaces legacy solvents including nPB,
 TCE, CFCs, HCFCs, HFCs and chlorinated solvents for thorough cleaning

73DE MicroCa

72DE MicroCare

Tergo XCF2



DEGREASER	BENEFITS	PART NUMBER	BP (°C)	KB VALUE	LIQUID DENSITY (g/mL)	GWP ¹	FLUORINATED FAMILY	PFAS? (OECD) ²
Tergo [™] CCA Use for light to moderate organic soils, rosin fluxes and particulates	 Fast drying, stable, non-flammable, non-corrosive Ideal replacement for: 3M™ Novec™ 71DE Engineered Fluid 	MCC-TCCA	380	32	1.36	270	HFE	YES
Tergo [™] HDF Aggressive cleaning agent	 Removes heavy greases, silicone fluids and resilient organic contaminants Ideal replacement for: TCE, nPB, 3M™ Novec™71DE, 72DE and 73DE Engineered Fluids 	MCC-THDF	46	115	1.27	11	HCFO / HFE	YES
Tergo™ XCF2 Removes heavy greases, silicone fluids and difficult organic contaminants	Thermally and hydrolytically stable, non-flammable, non-corrosive Ideal replacement for: 3M™ Novec™ 72DE and 73DE Engineered Fluid	MCC-TXCF2	47	118	1.28	<1	нсго	NO
Tergo™ XCF3 Removes caked-on greases, silicone fluids, organic contaminants and waxes	Thermally and hydrolytically stable, non-flammable, non-corrosive Ideal replacement for: 3M™ Novec™ 72DE and 73DE Engineered Fluid	MCC-TXCF3	45.6	115	1.29	<1	нсго	NO
MicroCare [™] 71DE Engineered Fluid Medium-duty degreasing of metal & plastic parts	 Removes oils, greases and waxes Ideal replacement for: 3M™ Novec™ 71DE Engineered Fluid 	MCC-71DEEF	41	27	1.37	160	HFE	YES
MicroCare [™] 72DE Engineered Fluid Medium to heavy-duty degreasing and coating and lubricant deposition	• Removes oils, grease and particulate • Ideal replacement for: 3M™ Novec™ 72DE Engineered Fluid	MCC-72DEEF	43	52	1.28	43	HFE	YES
MicroCare [™] 72FL Engineered Fluid Aircraft maintenance and cold cleaning	 Engineered for cleaning the outer surfaces of aircraft including flaps, control systems, connectors, electronic components, relays and circuit protection devices Ideal replacement for: 3M™ Novec™ 72FL Engineered Fluid 	MCC-72FLEF	45	100	1.4	71	HFE	YES
MicroCare [™] 73DE Engineered Fluid Medium to heavy-duty degreasing and coating and lubricant deposition	 Removes oils, waxes and silicone residues Ideal replacement for: 3M™ Novec™ 73DE Engineered Fluid 	MCC-73DEEF	98	<20	1.53	200	HFE	YES
Opteon™ SF79 Removes oil and grease	Maintains compositional stability during use Nonflamable, fast drying, low odor and toxicity	MCC-SF79	47	103	1.29	<15	HFO / HFC	YES
Opteon™ SF80 Cleans a wide range of contaminants	High solvency, low surface tension Nonflammable, fast drying	MCC-SF80	47	99	1.29	<2.5	HFO	YES

Global Warming Potential, calculated by 100-year time horizon, IPCC AR6.
 Organisation for Economic Co-operation and Development (OECD) PFAS definition, Jul. 2021.

SPECIALITY CARRIER & RINSING FLUIDS

ENGINEERED FOR CRITICAL TASKS FROM CLEANROOMS TO CIRCUIT BOARDS

For specialized cleaning or material delivery, choose MicroCare[™] Specialty Carrier and Rinsing Fluids.

Designed for cleaning, rinsing, static control and lubricant application, they deliver high-performance results every time.

KEY FEATURES

- ► High purity, fast-drying and residue-free
- Nonflammable and stable
- Low surface tension for better penetration
- Low toxicity and eco-friendly

COMMON USES

- Clean electronics, remove oils, waxes and particles
- Reduce static and control residues
- Speed up drying with IPA or ethanol blends
- Deliver fluorinated oils, PFPEs and specialty lubricants

MICROCARE™ SPECIALTY CARRIER & RINSING FLUIDS



DEGREASER	BENEFITS	PART NUMBER	BP (°C)	KB VALUE	LIQUID DENSITY (g/mL)	GWP ¹	FLUORINATED FAMILY	PFAS? (OECD) ²
Tergo™ PF100 Particle displacement and carrier solvent for fluorinated polymers, oils and greases	 Fast drying, excellent thermal, chemical and hydolytic stability Ideal replacement for: 3M™ Novec™ 7100 & 7200 Engineered Fluids 	MCC-TPF100	56	13	1.47	580	HFE	YES
Tergo™ PF100-IPA Mitigates situations where static or ionic charges are an issue	Added polarity of IPA aids in cleaning inorganic soils Effective drying agent Ideal replacement for: 3M™ Novec™ 7100IPA Engineered Fluid	MCC-TPF100IPA	56	13	1.47	580	HFE	YES
Tergo™ PF105 Use when added polarity of ethanol aids in cleaning inorganic soils	• Effective as a solvent drying agent • Ideal replacement for: 3M™ Novec™ 7100IPA Engineered Fluid	MCC-TPF105	54	14	1.4	580	HFE	YES
Tergo™ XCF1 Removes greases, silicones fluids and light organic contaminants	 Excellent permeability, fast drying Ideal replacement for: 3M™ Novec™ 71DE and 72DE Engineered Fluid 	MCC-TXCF1	54	44	1.39	<1	нсго	NO
MicroCare [™] HFE7100 Engineered Fluid Electronics cleaning and lubricant deposition	 Effective replacement for CFC, HCFC, HFC and PFC fluids, enabling greener operations Ideal replacement for: 3M™ Novec™ 7111 Engineered Fluid 	MCC-7100EF	61	<20	1.53	297	HFE	YES
MicroCare [™] 71IPA Engineered Fluid Light duty cleaning, rinsing and degreasing	Removes oils, waxes, greases and fingerprints Replaces ozone-depleting substances like CFC-113, HCFC-141b Ideal replacement for: 3M™ Novec™ 71IPA Engineered Fluid	MCC-71IPAEF	55	<20	1.48	310	HFE	YES
MicroCare [™] HFE7200 Engineered Fluid Electronics cleaning and lubricant deposition	Effective replacement for CFC, HCFC, HFC and PFC fluids, enabling greener operations Ideal replacement for: 3M™ Novec™ 7200 Engineered Fluid	MCC-7200EF	76	<20	1.53	55	HFE	YES
MicroCare [™] HFE7300 Engineered Fluid Electronics cleaning and lubricant deposition	 Effective replacement for PFPE, PFC, HCFC and HFC fluids, enabling greener operations Ideal replacement for: 3M™ Novec™ 7300 Engineered Fluid 	MCC-7300EF	98	<20	1.53	200	HFE	YES
Teres [™] HPCF High purity carrier fluid for coatings and lubricants	Evaporates quickly to leave a thin, uniform coating Removes particulate from delicate surfaces	MCC-THPCF	51	10	1.38	27	HFE	YES
Opteon™ SF33 Cleaning, drying and carrier fluid industrial solvent applications	Nonflammable, thermally stable Clear, colorless, low toxicity	MCC-SF33	33.4	11	1.36	2	HFO	YES
Vertrel [™] XF Clean ultra-fine particulates from substrates	High density, low viscosity, low surface tension Nonflammable, chemical and thermal stability	MCC-XF	54	10	1.58	1650	HFC	YES

¹ Global Warming Potential, calculated by 100-year time horizon, IPCC AR6. ² Organisation for Economic Co-operation and Development (OECD) PFAS definition, Jul. 2021.



Duraglide[™] XF Dry Lubricant Precision Lubrication with PTFE Performance

ISO 10993 CERTIFIED
Easy to Validate

Ideal for precision parts, medical devices and components requiring long-lasting, dry lubrication.

Duraglide[™] XF delivers a fast, clean, and uniform dry PTFE coating to even the most complex surface geometries. Using a volatile carrier fluid, it deposits a thin lubricating film that reduces friction without attracting dust or debris.

FEATURES & BENEFITS:

- Fast-drying, non-flammable formula for safe, efficient use
- ► ISO 10993* tested—suitable for medical and sensitive applications
- Non-silicone, non-migrating film stays where it's applied
- Low odor for improved workplace comfort



Aerosol Spray MCC-DGF14A

Steel Pail MCC-XF020P

Glass Gallon MCC-XF020GG



Why is Duraglide[™] called a "dry lubricant" when it is applied as a liquid?

Duraglide[™] consists of PTFE particles dispersed in a fast-drying liquid carrier. When applied by dipping, spraying or brushing, the liquid carrier quickly evaporates (typically in seconds) and the treated parts are coated with an oil-free, PTFE lubricant that is dry to the touch and non-migrating.

Swellex[™] Swelling Agent

Make assembly easier and more precise. Swellex[™] swelling agents are proprietary solvents designed to expand molded silicone rubber components and tubing for easy assembly. By swelling the treated materials to the desired size, Swellex™ enables a smooth fit over fittings or rigid parts with complex shapes.



FEATURES & BENEFITS:

 Evaporate quickly
 Residue-free from polymer substrate Excellent materials compatibility

Swellex[™] Low GWP Swelling Agent:

Ideal for silicone rubber components and tubing.

Swellex[™]-P Polyurethane Swelling Agent:

Formulated specifically for molded polyurethane flexible components and tubing.

Swellex[™] Low GWP

Steel Pail MCC-SWX2P

Glass Gallon MCC-SWX2GG

Swellex[™]-P Polyurethane

Steel Pail MCC-SWXP0P

Glass Gallon MCC-SWXP0GG

MicroCare Medical™ Universal Carrier Fluid II

MicroCare Medical™ Universal Carrier Fluid II is custom formulated for the deposition of polydimethylsiloxane (PDMS) or similar medical grade silicone lubricant fluids.

FEATURES & BENEFITS:

- Non-flammable, fast-drying
- Minimal solvent odor
- Non migrating, no silicone
- Factory calibrated PTFE



Steel Drum MCC-UCF2D

Steel Pail MCC-UCF2P

Glass Gallon MCC-UCF2GG

VDX PTFE Dry Lubricant Spray

VDX provides a clean, dry PTFE coating that reduces friction, wear and 'stiction' on moving parts. Ideal for chains, guides, dies, chutes, and other components under high pressure or load. It stays in place without attracting dust or dirt, even on metals, plastics, rubber or ceramics.



Aerosol Spray MCC-VDX

FEATURES & BENEFITS:

- Factory calibrated PTFE content for consistent results
- Fast drying with minimal odor
- Nonflammable, maximum safety in storage and use
- Oil free, non-migrating/non-staining
- Does not contain silicone
- Excellent materials compatibility, plastic-safe
- Low cost, convenient aerosol dispensing

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EXPERTISE YOU CAN TRUST

Cleaning application scientists answer your questions

The MicroCare application scientists are well-versed in critical cleaning methods and fluids. On-site regional sales managers and in-house chemists offer you the know-how to solve your critical cleaning problems.





ON-SITE **CLEANING AUDITS**



CLEANING TRIALS







Sustainable products for a better future

Let us help you establish a sustainable cleaning process with minimal volatile organic compound (VOC) and low global warming potential (GWP) cleaning fluids. Get reliable cleaning performance and meet stringent local, national and global environmental policies.

Stay informed at MicroCare.com

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- Access regulatory news, case studies and more!

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